



**Pulseless Arrest**

Approval: Troy M. Falck, MD – Medical Director

Effective: 12/01/2020

Approval: Victoria Pinette – Executive Director

Next Review: 09/2023

**MANUAL CHEST COMPRESSIONS**

**MECHANICAL CHEST COMPRESSION DEVICES**

- Rate: 100-120/min
- Depth: 2 inches, allow full chest recoil
- Minimize interruptions ( $\leq 10$  secs)
- Rotate compressors every 2 mins
- Perform CPR during AED/defibrillator charging
- Resume CPR immediately after shock

- |  |   |
|--|---|
| <p><b>Indications</b></p> <ul style="list-style-type: none"> <li>• Adult pt (<math>\geq 15</math> yo)</li> <li>• Non-traumatic cardiac arrest</li> </ul> | <p><b>Contraindications</b></p> <ul style="list-style-type: none"> <li>• Pt does not fit in the device</li> <li>• 3<sup>rd</sup> trimester pregnancy</li> </ul> |
|--|---|
- Apply following completion of at least one manual CPR cycle, or at the end of a subsequent cycle

**DEFIBRILLATION & GENERAL PT MANAGEMENT**

**ADVANCED AIRWAY MANAGEMENT**

- Analyze rhythm & check pulse after every 2 min CPR cycle
- Biphasic manual defibrillation detail:
  - Follow manufacturer’s recommendations
  - If unknown, start at 200 J (subsequent doses should be equivalent or higher)
- Movement of pt may interrupt CPR or prevent adequate depth and rate of compressions
- Consider resuscitation on scene up to 30 mins
- Go to ROSC protocol (C-2) if ROSC is obtained

- Consider/establish advanced airway at appropriate time during resuscitation
- Do not interrupt chest compressions to establish an advanced airway
- Waveform capnography (if available) shall be used on all patients with an advanced airway in place
  - An abrupt increase in PETCO<sub>2</sub> is indicative of ROSC
  - Persistently low PETCO<sub>2</sub> levels ( $< 10$  mmHG) suggest ROSC is unlikely

**CONSIDER REVERSIBLE CAUSES\***

**TERMINATION OF RESUSCITATION**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Hypovolemia</li> <li>• Hypoxia</li> <li>• Hydrogen Ion (acidosis)</li> <li>• Hypo-/hyperkalemia</li> <li>• Hypothermia</li> </ul> | <ul style="list-style-type: none"> <li>• Tamponade, cardiac</li> <li>• Tension pneumothorax</li> <li>• Thrombosis, pulmonary</li> <li>• Thrombosis, cardiac</li> <li>• Toxins</li> </ul> |
|--|--|

\*Contact the base/modified base hospital for consultation & treatment/medication orders not specifically listed in this protocol or other applicable policies/protocols

**Base/Modified Base Hospital Physician Order\*\***

- If resuscitation attempts do not obtain ROSC, consider termination of resuscitation efforts
- BLS termination of resuscitation criteria (all):
  - (1) Arrest not witnessed by EMS
  - (2) No AED shocks delivered
  - (3) No ROSC after 3 rounds of CPR/AED analysis
- ALS Termination of Resuscitation Criteria (all):
  - (1) Arrest not witnessed by EMS
  - (2) No effective bystander CPR was provided, or effective CPR cannot be maintained
  - (3) No ROSC after full ALS care

\*\*In the event of communication failure, EMS personnel may terminate resuscitation, without a base/modified base hospital physician order, on a pt who meets ALS termination of resuscitation criteria.

**SEE PAGE 2 FOR TREATMENT ALGORITHM**



**Pulseless Arrest**

